

# **MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Dana Corporation - Spicer Axle Division  
501 West Railroad Avenue  
Syracuse, Indiana 46567**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 085-10675-00033	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary axle component production and assembly operation.

Authorized Individual: Michael D. Kline  
Source Address: 501 West Railroad Avenue, Syracuse, Indiana 46567  
Mailing Address: P.O. Box 67, Syracuse, Indiana 46567  
Phone Number: 219-457-7716  
SIC Code: 3714  
County Location: Kosciusko  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) natural gas draw furnace, known as draw furnace, installed in 1982, exhausting to stack S47, rated at 4.0 million British thermal units per hour.
- (b) Two (2) natural gas fired heated washers, known as washer #1 and washer #8, installed in 1998, exhausting to stacks S35 and S34 respectively, rated at 2.54 million British thermal units per hour, each.
- (c) Two (2) natural gas fired heated washers, known as washer #2 and #7, installed in 1995, exhausting to stacks S6 and S29 respectively, rated at 1.5 million British thermal unit per hour, each.
- (d) Four (4) natural gas fired heated washers, known as washer #3 through #5 and #10, installed in 1996, exhausting to stacks S20 through S18 and S30 respectively, rated at 1.5 million British thermal unit per hour, each.
- (e) Two (2) natural gas fired heated washers, known as washer #6 and #13, installed in 1998, exhausting to stacks S36 and S56 respectively, rated at 0.3 million British thermal unit per hour, each.
- (f) One (1) natural gas fired heated washer, known as washer #9, installed in 1994, exhausting to stack S52, rated at 1.5 million British thermal unit per hour.
- (g) Two (2) natural gas fired heated washers, known as washer #11 and #12, installed in 1980, exhausting to stacks S31 and S41 respectively, rated at 0.8 million British thermal unit per hour, each.

- (h) One (1) natural gas boiler, known as boiler, installed in 1985, exhausting to stack S12, rated at 0.13 million British thermal units per hour.
- (i) Three (3) natural gas fired air makeup units, known as air makeup unit #1 through #3, installed in 1979, exhausted to stacks S5, S8 and S39 respectively, rated at 5.0 million British thermal unit per hour, each.
- (j) Two (2) natural gas fired air makeup units, known as air makeup unit #4 and #5, installed in 1986, exhausted to stacks S10 and S11 respectively, rated at 5.0 million British thermal unit per hour, each.
- (k) One (1) natural gas fired air makeup unit, known as air makeup unit #6, installed in 1970, exhausted to stack S14, rated at 4.125 million British thermal unit per hour.
- (l) One (1) natural gas fired air makeup unit, known as air makeup unit #7, installed in 1986, exhausted to stack S40, rated at 5.0 million British thermal unit per hour.
- (m) Two (2) natural gas fired space heaters, known as space heater #1 and #2 installed in 1990, exhausted to stacks S3 and S4 respectively, rated at 0.3 million British thermal unit per hour, each.
- (n) Two (2) natural gas fired space heaters, known as space heater #3 and #22 installed in 1995, exhausted to stacks S37 and S38 respectively, rated at 0.3 million British thermal unit per hour, each.
- (o) One (1) natural gas fired space heater, known as space heater #4 installed in 1985, exhausted to stack S43, rated at 0.3 million British thermal unit per hour.
- (p) One (1) natural gas fired space heater, known as space heater #6 installed in 1985, exhausted to stack S44, rated at 0.25 million British thermal unit per hour.
- (q) Two (2) natural gas fired space heaters, known as space heaters #7 and #8 installed in 1990, exhausted to stacks S21 and S22 respectively, rated at 0.25 million British thermal unit per hour, each.
- (r) One (1) natural gas fired space heater, known as space heater #9 installed in 1995, exhausted to stack S45, rated at 0.25 million British thermal unit per hour.
- (s) One (1) natural gas fired space heater, known as space heater #10 installed in 1985, exhausted to stack S23, rated at 0.25 million British thermal unit per hour.
- (t) Three (3) natural gas fired space heaters, known as space heaters #11 through #13 installed in 1996, exhausted to stacks S49 through S51 respectively, rated at 0.25 million British thermal unit per hour, each.
- (u) One (1) natural gas fired space heater, known as space heater #14 installed in 1979, exhausted to stack S1, rated at 0.225 million British thermal unit per hour.
- (v) One (1) natural gas fired space heater, known as space heater #15 installed in 1991, exhausted to stack S2, rated at 0.225 million British thermal unit per hour.

- (w) Three (3) natural gas fired space heaters, known as space heater #16 through #18 installed in 1991, exhausted to stacks S9, S15 and S16 respectively, rated at 0.25 million British thermal unit per hour, each.
- (x) One (1) natural gas fired space heater, known as space heater #19 installed in 1991, exhausted to stack S24, rated at 0.112 million British thermal unit per hour.
- (y) Two (2) natural gas fired space heaters, known as space heater #20 and #24 installed in 1979, exhausted to stacks S26 and S48 respectively, rated at 0.10 million British thermal unit per hour, each.
- (z) One (1) natural gas fired space heater, known as space heater #21 installed in 1991, exhausted to stack S27, rated at 0.12 million British thermal unit per hour.
- (aa) One (1) natural gas fired space heater, known as space heater #23 installed before 1977, exhausted to stack S46, rated at 0.10 million British thermal unit per hour.
- (bb) One (1) natural gas fired space heater, known as space heater #25 installed in 1998, exhausted to stacks S54, rated at 0.30 million British thermal unit per hour.
- (cc) One (1) flowcoater, known as flowcoater #1, installed in 1995, exhausted to S7, equipped with dry filters for particulate overspray control, capacity: 1,500 axles per hour.
- (dd) One (1) waste water treatment system, known as wastewater treatment, installed in 1985, equipped with scrubber F, capacity: 7,000 gallons per day.
- (ee) Six (6) metal inert gas (MIG) welders, known as MIG 3-76-72, 3-76-67, 3-76-69, 3-76-70, 3-76-68 and 3-76-71, installed in 1998, exhausted to baghouse C, capacity 125 pounds of wire per day, each.
- (ff) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-58 and 3-76-53, installed in 1997, exhausted to baghouse E, capacity 125 pounds of wire per day, each.
- (gg) One (1) metal inert gas (MIG) welder, known as MIG 3-76-73, installed in 1998, exhausted to baghouse A, capacity 125 pounds of wire per day.
- (hh) One (1) metal inert gas (MIG) welder, known as MIG 3-76-55, installed in 1996, exhausted to baghouse C, capacity 125 pounds of wire per day.
- (ii) Three (3) metal inert gas (MIG) welders, known as MIG 3-76-34, 3-76-33 and 3-76-35, installed in 1992, exhausted to baghouse B, capacity 100 pounds of wire per day, each.
- (jj) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-48 and 3-76-46, installed in 1996, exhausted to baghouse A, capacity 100 pounds of wire per day, each.
- (kk) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-62 and 3-76-60, installed in 1998, exhausted to baghouse B, capacity 100 pounds of wire per day, each.
- (ll) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-63 and 3-76-65, installed in 1998, exhausted to baghouse D, capacity 100 pounds of wire per day, each.
- (mm) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-57 and 3-76-61, installed in 1997, exhausted to baghouse D, capacity 100 pounds of wire per day, each.



- (nn) One (1) metal inert gas (MIG) welder, known as MIG 3-76-43, installed in 1995, exhausted to baghouse B, capacity 100 pounds of wire per day.
- (oo) One (1) metal inert gas (MIG) welder, known as MIG 3-76-40, installed in 1994, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (pp) One (1) metal inert gas (MIG) welder, known as MIG of 3-76-44, installed in 1996, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (qq) One (1) metal inert gas (MIG) welder, known as MIG 3-76-52, installed in 1996, exhausted to baghouse B, capacity 100 pounds of wire per day.
- (rr) One (1) metal inert gas (MIG) welder, known as MIG 3-76-45, installed in 1995, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (ss) One (1) metal inert gas (MIG) welder, known as MIG 3-76-54, installed in 1996, exhausted to baghouse D, capacity 100 pounds of wire per day.
- (tt) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-37 and 3-76-36, installed in 1993, exhausted to baghouse D, capacity 50 pounds of wire per day, each.
- (uu) One (1) metal inert gas (MIG) welder, known as MIG 3-76-41, installed in 1994, exhausted to baghouse E, capacity 50 pounds of wire per day.
- (vv) One (1) metal inert gas (MIG) welder, known as MIG 3-76-47 and 3-76-49, installed in 1996, exhausted to baghouse A, capacity 50 pounds of wire per day.
- (ww) One (1) intershield welder, known as INT 3-76-25, installed in 1987, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (xx) Two (2) intershield welders, known as INT 1-73-1 and 1-73-2, installed in 1988, exhausted to baghouse C and D respectively, capacity 100 pounds of wire per day, each.
- (yy) One (1) intershield welder, known as INT 1-73-4, installed in 1993, exhausted to baghouse A, capacity 100 pounds of wire per day.
- (zz) One (1) intershield welder, known as INT3-76-39, installed in 1994, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (aaa) One (1) intershield welder, known as INT 3-76-42, installed in 1995, exhausted to baghouse D, capacity 100 pounds of wire per day.
- (bbb) Two (2) intershield welders, known as INT 3-76-50 and 3-76-51, installed in 1996, exhausted to baghouse D, capacity 100 pounds of wire per day, each.
- (ccc) One (1) intershield welder, known as INT 3-76-59, installed in 1997, exhausted to baghouse A, capacity 100 pounds of wire per day.
- (ddd) Two (2) intershield welders, known as INT 3-76-64 and 3-76-66, installed in 1998, exhausted to baghouse C and D respectively, capacity 100 pounds of wire per day, each.
- (eee) One (1) gasoline storage tank, known as T1, installed in 1980, capacity: 2,000 gallons.



- (fff) Three (3) empty fuel oil storage tanks, known as T3 through T5, installed in 1952, capacity: 12,000 gallons, each.
- (ggg) One (1) hydraulic oil storage tank, known as T7, installed in 1980, capacity: 10,000 gallons.
- (hhh) One (1) cutting oil storage tank, known as T8, installed in 1980, capacity: 10,000 gallons.
- (iii) One (1) sulfuric acid storage tank, known as T9, installed in 1985, capacity: 10,000 gallons.
- (jjj) One (1) magnesium hydroxide storage tank, known as T10, installed in 1985, capacity: 10,000 gallons.
- (kkk) One (1) quenching operation, known as quenching, installed in 1984, capacity: 30,000 gallons per year.
- (lll) Five (5) milling machines, known as 1-50-36, 1-50-37, 2-50-6, 2-50-7 and 2-50-8, capacity: 397 pounds per hour, each.
- (mmm) One (1) milling machine, known as 1-53-23, capacity: 895 pounds per hour.
- (nnn) One (1) milling machine, known as 1-53-11, capacity: 1,282 pounds per hour.
- (ooo) One (1) milling machine, known as 1-53-16, capacity: 1,244 pounds per hour.
- (ppp) One (1) milling machine, known as 1-53-18, capacity: 1,809 pounds per hour.
- (qqq) One (1) milling machine, known as 1-53-22, capacity: 2,829 pounds per hour.
- (rrr) One (1) boring machine, known as 3-77-2, capacity: 929 pounds per hour.
- (sss) One (1) boring machine, known as 3-77-3, capacity: 768 pounds per hour.
- (ttt) One (1) boring machine, known as 3-77-4, capacity: 910 pounds per hour.
- (uuu) Five (5) de-burring machines, capacity: 812 per hour, each.
- (vvv) Four (4) buffing machines, known as 2-11-2, 2-11-4, 1-61-87 and 1-61-91, one (10 buffing machine exhausts to S57 capacity: 700 pounds per hour, each.

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1      Permit No Defense [IC 13]**

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Modification to Permit [326 IAC 2]**

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6      Minor Source Operating Permit [326 IAC 2-6.1]**

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a)      The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
  - (1)      If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (2)      If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b)      If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c)      Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source
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**C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]**

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.
- (c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.

**C.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

**C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]**

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]

#### C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit **to construct and** operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.

- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements**

**C.9 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]**

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Compliance Monitoring Requirements**

#### **C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]**

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### **C.12 Monitoring Methods [326 IAC 3]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (C.P.) for each compliance monitoring condition of this permit. C.P.'s shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The C.P. shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

#### **Record Keeping and Reporting Requirements**

##### **C.14 Malfunctions Report [326 IAC 1-6-2]**

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more



than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;

- (5) The results of such analyses; and
- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

**SECTION D.1**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description - Natural Gas Combustion**

- (a) One (1) natural gas draw furnace, known as draw furnace, installed in 1982, exhausting to stack S47, rated at 4.0 million British thermal units per hour.
- (b) Two (2) natural gas fired heated washers, known as washer #1 and washer #8, installed in 1998, exhausting to stacks S35 and S34 respectively, rated at 2.54 million British thermal units per hour, each.
- (c) Two (2) natural gas fired heated washers, known as washer #2 and #7, installed in 1995, exhausting to stacks S6 and S29 respectively, rated at 1.5 million British thermal unit per hour, each.
- (d) Four (4) natural gas fired heated washers, known as washer #3 through #5 and #10, installed in 1996, exhausting to stacks S20 through S18 and S30 respectively, rated at 1.5 million British thermal unit per hour, each.
- (e) Two (2) natural gas fired heated washers, known as washer #6 and #13, installed in 1998, exhausting to stacks S36 and S56 respectively, rated at 0.3 million British thermal unit per hour, each.
- (f) One (1) natural gas fired heated washer, known as washer #9, installed in 1994, exhausting to stack S52, rated at 1.5 million British thermal unit per hour.
- (g) Two (2) natural gas fired heated washers, known as washer #11 and #12, installed in 1980, exhausting to stacks S31 and S41 respectively, rated at 0.8 million British thermal unit per hour, each.
- (h) One (1) natural gas boiler, known as boiler, installed in 1985, exhausting to stack S12, rated at 0.13 million British thermal units per hour.
- (i) Three (3) natural gas fired air makeup units, known as air makeup unit #1 through #3, installed in 1979, exhausted to stacks S5, S8 and S39 respectively, rated at 5.0 million British thermal unit per hour, each.
- (j) Two (2) natural gas fired air makeup units, known as air makeup unit #4 and #5, installed in 1986, exhausted to stacks S10 and S11 respectively, rated at 5.0 million British thermal unit per hour, each.
- (k) One (1) natural gas fired air makeup unit, known as air makeup unit #6, installed in 1970, exhausted to stack S14, rated at 4.125 million British thermal unit per hour.
- (l) One (1) natural gas fired air makeup unit, known as air makeup unit #7, installed in 1986, exhausted to stack S40, rated at 5.0 million British thermal unit per hour.
- (m) Two (2) natural gas fired space heaters, known as space heater #1 and #2 installed in 1990, exhausted to stacks S3 and S4 respectively, rated at 0.3 million British thermal unit per hour, each.
- (n) Two (2) natural gas fired space heaters, known as space heater #3 and #22 installed in 1995, exhausted to stacks S37 and S38 respectively, rated at 0.3 million British thermal unit per hour, each.
- (o) One (1) natural gas fired space heater, known as space heater #4 installed in 1985, exhausted to stack S43, rated at 0.3 million British thermal unit per hour.
- (p) One (1) natural gas fired space heater, known as space heater #6 installed in 1985, exhausted to stack S44, rated at 0.25 million British thermal unit per hour.
- (q) Two (2) natural gas fired space heaters, known as space heaters #7 and #8 installed in 1990, exhausted to stacks S21 and S22 respectively, rated at 0.25 million British thermal unit per hour, each.
- (r) One (1) natural gas fired space heater, known as space heater #9 installed in 1995, exhausted to stack S45, rated at 0.25 million British thermal unit per hour.
- (s) One (1) natural gas fired space heater, known as space heater #10 installed in 1985, exhausted to stack S23, rated at 0.25 million British thermal unit per hour.
- (t) Three (3) natural gas fired space heaters, known as space heaters #11 through #13 installed in 1996, exhausted to stacks S49 through S51 respectively, rated at 0.25 million British thermal unit per hour, each.
- (u) One (1) natural gas fired space heater, known as space heater #14 installed in 1979, exhausted to stack S1, rated at 0.225 million British thermal unit per hour.
- (v) One (1) natural gas fired space heater, known as space heater #15 installed in 1991, exhausted to stack S2, rated at 0.225 million British thermal unit per hour.
- (w) Three (3) natural gas fired space heaters, known as space heater #16 through #18 installed in 1991, exhausted to stacks S9, S15 and S16 respectively, rated at 0.25 million British thermal unit per hour, each.
- (x) One (1) natural gas fired space heater, known as space heater #19 installed in 1991, exhausted to stack S24, rated at 0.112 million British thermal unit per hour.
- (y) Two (2) natural gas fired space heaters, known as space heater #20 and #24 installed in 1979, exhausted to stacks S26 and S48 respectively, rated at 0.10 million British thermal unit per hour, each.
- (z) One (1) natural gas fired space heater, known as space heater #21 installed in 1991, exhausted to stack S27, rated at 0.12 million British thermal unit per hour.
- (aa) One (1) natural gas fired space heater, known as space heater #23 installed before 1977, exhausted to stack S46, rated at 0.10 million British thermal unit per hour.
- (bb) One (1) natural gas fired space heater, known as space heater #25 installed in 1998, exhausted to stacks S54, rated at 0.30 million British thermal unit per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-6.1-5(1)]**

**D.1.1 Particulate Matter (PM)**

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Pursuant to 326 IAC 6-2-4(a) (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(c) the PM emissions from the 0.013 MMBtu per hour heat input boiler shall be limited to 0.6 pounds per MMBtu heat input.

**Compliance Determination Requirement [326 IAC 2-1.1-11]**

**D.1.2 Testing Requirements [326 IAC 2-1.1-11]**

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The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description - Welding

- (ee) Six (6) metal inert gas (MIG) welders, known as MIG 3-76-72, 3-76-67, 3-76-69, 3-76-70, 3-76-68 and 3-76-71, installed in 1998, exhausted to baghouse C, capacity 125 pounds of wire per day, each.
- (ff) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-58 and 3-76-53, installed in 1997, exhausted to baghouse E, capacity 125 pounds of wire per day, each.
- (gg) One (1) metal inert gas (MIG) welder, known as MIG 3-76-73, installed in 1998, exhausted to baghouse A, capacity 125 pounds of wire per day.
- (hh) One (1) metal inert gas (MIG) welder, known as MIG 3-76-55, installed in 1996, exhausted to baghouse C, capacity 125 pounds of wire per day.
- (ii) Three (3) metal inert gas (MIG) welders, known as MIG 3-76-34, 3-76-33 and 3-76-35, installed in 1992, exhausted to baghouse B, capacity 100 pounds of wire per day, each.
- (jj) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-48 and 3-76-46, installed in 1996, exhausted to baghouse A, capacity 100 pounds of wire per day, each.
- (kk) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-62 and 3-76-60, installed in 1998, exhausted to baghouse B, capacity 100 pounds of wire per day, each.
- (ll) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-63 and 3-76-65, installed in 1998, exhausted to baghouse D, capacity 100 pounds of wire per day, each.
- (mm) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-57 and 3-76-61, installed in 1997, exhausted to baghouse D, capacity 100 pounds of wire per day, each.
- (nn) One (1) metal inert gas (MIG) welder, known as MIG 3-76-43, installed in 1995, exhausted to baghouse B, capacity 100 pounds of wire per day.
- (oo) One (1) metal inert gas (MIG) welder, known as MIG 3-76-40, installed in 1994, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (pp) One (1) metal inert gas (MIG) welder, known as MIG of 3-76-44, installed in 1996, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (qq) One (1) metal inert gas (MIG) welder, known as MIG 3-76-52, installed in 1996, exhausted to baghouse B, capacity 100 pounds of wire per day.
- (rr) One (1) metal inert gas (MIG) welder, known as MIG 3-76-45, installed in 1995, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (ss) One (1) metal inert gas (MIG) welder, known as MIG 3-76-54, installed in 1996, exhausted to baghouse D, capacity 100 pounds of wire per day.
- (tt) Two (2) metal inert gas (MIG) welders, known as MIG 3-76-37 and 3-76-36, installed in 1993, exhausted to baghouse D, capacity 50 pounds of wire per day, each.
- (uu) One (1) metal inert gas (MIG) welder, known as MIG 3-76-41, installed in 1994, exhausted to baghouse E, capacity 50 pounds of wire per day.
- (vv) One (1) metal inert gas (MIG) welder, known as MIG 3-76-47 and 3-76-49, installed in 1996, exhausted to baghouse A, capacity 50 pounds of wire per day.
- (ww) One (1) intershield welder, known as INT 3-76-25, installed in 1987, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (xx) Two (2) intershield welders, known as INT 1-73-1 and 1-73-2, installed in 1988, exhausted to baghouse C and D respectively, capacity 100 pounds of wire per day, each.
- (yy) One (1) intershield welder, known as INT 1-73-4, installed in 1993, exhausted to baghouse A, capacity 100 pounds of wire per day.
- (zz) One (1) intershield welder, known as INT 3-76-39, installed in 1994, exhausted to baghouse E, capacity 100 pounds of wire per day.
- (aaa) One (1) intershield welder, known as INT 3-76-42, installed in 1995, exhausted to baghouse D, capacity 100 pounds of wire per day.
- (bbb) Two (2) intershield welders, known as INT 3-76-50 and 3-76-51, installed in 1996, exhausted to baghouse D, capacity 100 pounds of wire per day, each.
- (ccc) One (1) intershield welder, known as INT 3-76-59, installed in 1997, exhausted to baghouse A, capacity 100 pounds of wire per day.
- (ddd) Two (2) intershield welders, known as INT 3-76-64 and 3-76-66, installed in 1998, exhausted to baghouse C and D respectively, capacity 100 pounds of wire per day, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards [326 IAC 2-6.1-5(1)]**

### **D.2.1 Particulate Matter (PM) [326 IAC 6-3]**

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding facilities shall not exceed 0.777 pounds per hour when operating at a process weight rate of 167 pounds of welding wire per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.} \end{array}$$

## **Compliance Determination Requirements [326 IAC 2-1.1-11]**

### **D.2.2 Particulate Matter (PM)**

The baghouses for PM control shall be in operation at all times when the welding units are in operation.

## **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

### **D.2.3 Visible Emissions Notations**

- (a) Daily visible emission notations of the each baghouse's exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### **D.2.4 Baghouse Inspections**

An inspection shall be performed each calendar quarter of all bags controlling the welding operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.



#### D.2.5 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### **Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

#### D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the all the baghouse's stack exhaust.
- (b) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.5 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.3

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description - Flowcoater

- (cc) One (1) flowcoater, known as flowcoater #1, installed in 1995, exhausted to S7, equipped with dry filters for particulate overspray control, capacity: 1,500 axles per hour.
- (dd) One (1) waste water treatment system, known as wastewater treatment, installed in 1985, equipped with scrubber F, capacity: 7,000 gallons per day.
- (eee) One (1) gasoline storage tank, known as T1, installed in 1980, capacity: 2,000 gallons.
- (fff) Three (3) empty fuel oil storage tanks, known as T3 through T5, installed in 1952, capacity: 12,000 gallons, each.
- (ggg) One (1) hydraulic oil storage tank, known as T7, installed in 1980, capacity: 10,000 gallons.
- (hhh) One (1) cutting oil storage tank, known as T8, installed in 1980, capacity: 10,000 gallons.
- (iii) One (1) sulfuric acid storage tank, known as T9, installed in 1985, capacity: 10,000 gallons.
- (jjj) One (1) magnesium hydroxide storage tank, known as T10, installed in 1985, capacity: 10,000 gallons.
- (kkk) One (1) quenching operation, known as quenching, installed in 1984, capacity: 30,000 gallons per year

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the flowcoater operation shall be limited by the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

#### D.3.2 Volatile Organic Compounds (VOC)

Any change or modification which may increase potential VOC emissions to fifteen (15) pounds per day from the flowcoater operation shall obtain prior approval from IDEM, OAM and subject the flowcoater operation to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) before such change may occur.

### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.3.3 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Condition D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.2.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC usage for each month; and
  - (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description - Milling machines, Boring machines, De-burring machines and Buffing machines

- (lll) Five (5) milling machines, known as 1-50-36, 1-50-37, 2-50-6, 2-50-7 and 2-50-8, capacity: 397 pounds per hour, each.
- (mmm) One (1) milling machine, known as 1-53-23, capacity: 895 pounds per hour.
- (nnn) One (1) milling machine, known as 1-53-11, capacity: 1,282 pounds per hour.
- (ooo) One (1) milling machine, known as 1-53-16, capacity: 1,244 pounds per hour.
- (ppp) One (1) milling machine, known as 1-53-18, capacity: 1,809 pounds per hour.
- (qqq) One (1) milling machine, known as 1-53-22, capacity: 2,829 pounds per hour.
- (rrr) One (1) boring machine, known as 3-77-2, capacity: 929 pounds per hour.
- (sss) One (1) boring machine, known as 3-77-3, capacity: 768 pounds per hour.
- (ttt) One (1) boring machine, known as 3-77-4, capacity: 910 pounds per hour.
- (uuu) Five (5) de-burring machines, capacity: 812 per hour, each.
- (vvv) Four (4) buffing machines, known as 2-11-2, 2-11-4, 1-61-87 and 1-61-91, one (1) buffing machine exhausts to S57 capacity: 700 pounds per hour, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the milling machines, boring machines, de-burring machines and buffing machines shall be limited by the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.} \end{array}$$

### Compliance Determination Requirement [326 IAC 2-1.1-11]

#### D.4.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test these emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES ?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ Dana Corporation - Spicer Axle Division \_\_\_\_\_ PHONE NO. : \_\_\_\_\_ (219) 457 - 4422  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_ Syracuse / Kosciusko \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ 085-10675 \_\_\_\_\_ AS PLANT ID: \_\_\_\_\_ 085-00033 \_\_\_\_\_ AS POINT ID: \_\_\_\_\_ INP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_\_ / \_\_\_\_\_ / 19\_\_\_\_\_ \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_\_ / \_\_\_\_\_ / 19\_\_\_\_\_ \_\_\_\_\_ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Dana Corporation - Spicer Axle Division</b>
<b>Address:</b>	<b>501 West Railroad Avenue</b>
<b>City:</b>	<b>Syracuse, Indiana 46567</b>
<b>Phone #:</b>	<b>(219) 457 - 4422</b>
<b>MSOP #:</b>	<b>085-10675-00033</b>

I hereby certify that Dana Corporation - Spicer Axle Division is:

☒ still in operation.

☐ no longer in operation.

I hereby certify that Dana Corporation - Spicer Axle Division is:

☒ in compliance with the requirements of MSOP **085-10675-00033**.

☐ not in compliance with the requirements of MSOP **085-10675-00033**.

<b>Authorized Individual (typed):</b>	<b>Michael D. Kline</b>
<b>Title:</b>	
<b>Signature:</b>	
<b>Date:</b>	

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Dana Corporation-Spicer Axle Division  
Source Address: 501 West Railroad Avenue, Syracuse, Indiana 46567  
Mailing Address: P.O. Box 67, Syracuse, Indiana 46567  
MSOP Permit No.: 085-10675-00033

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement</b> (e.g. Permit Condition D.1.3)	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.



## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Minor Source Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Dana Corporation - Spicer Axle Division</b>
<b>Source Location:</b>	<b>501 West Railroad Avenue, Syracuse, Indiana 46567</b>
<b>County:</b>	<b>Kosciusko</b>
<b>SIC Code:</b>	<b>3714</b>
<b>Operation Permit No.:</b>	<b>MSOP 085-10675-00033</b>
<b>Permit Reviewer:</b>	<b>Paula M Miano/MES</b>

The Office of Air Management (OAM) has reviewed an application from Dana Corporation - Spicer Axle Division relating to the construction and operation of an axle component production and assembly operation.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted facilities operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted facilities/units:

- (a) One (1) natural gas draw furnace, known as draw furnace, installed in 1982, exhausting to stack S47, rated at 4.0 million British thermal units per hour.
- (b) Two (2) natural gas fired heated washers, known as washer #1 and washer #8, installed in 1998, exhausting to stacks S35 and S34 respectively, rated at 2.54 million British thermal units per hour, each.
- (c) Two (2) natural gas fired heated washers, known as washer #2 and #7, installed in 1995, exhausting to stacks S6 and S29 respectively, rated at 1.5 million British thermal unit per hour, each.
- (d) Four (4) natural gas fired heated washers, known as washer #3 through #5 and #10, installed in 1996, exhausting to stacks S20 through S18 and S30 respectively, rated at 1.5 million British thermal unit per hour, each.
- (e) Two (2) natural gas fired heated washers, known as washer #6 and #13, installed in 1998, exhausting to stacks S36 and S56 respectively, rated at 0.3 million British thermal unit per hour, each.

- (f) One (1) natural gas fired heated washer, known as washer #9, installed in 1994, exhausting to stack S52, rated at 1.5 million British thermal unit per hour.
- (g) Two (2) natural gas fired heated washers, known as washer #11 and #12, installed in 1980, exhausting to stacks S31 and S41 respectively, rated at 0.8 million British thermal unit per hour, each.
- (h) One (1) natural gas boiler, known as boiler, installed in 1985, exhausting to stack S12, rated at 0.13 million British thermal units per hour.
- (i) Three (3) natural gas fired air makeup units, known as air makeup unit #1 through #3, installed in 1979, exhausted to stacks S5, S8 and S39 respectively, rated at 5.0 million British thermal unit per hour, each.
- (j) Two (2) natural gas fired air makeup units, known as air makeup unit #4 and #5, installed in 1986, exhausted to stacks S10 and S11 respectively, rated at 5.0 million British thermal unit per hour, each.
- (k) One (1) natural gas fired air makeup unit, known as air makeup unit #6, installed in 1970, exhausted to stack S14, rated at 4.125 million British thermal unit per hour.
- (l) One (1) natural gas fired air makeup unit, known as air makeup unit #7, installed in 1986, exhausted to stack S40, rated at 5.0 million British thermal unit per hour.
- (m) Two (2) natural gas fired space heaters, known as space heater #1 and #2 installed in 1990, exhausted to stacks S3 and S4 respectively, rated at 0.3 million British thermal unit per hour, each.
- (n) Two (2) natural gas fired space heaters, known as space heater #3 and #22 installed in 1995, exhausted to stacks S37 and S38 respectively, rated at 0.3 million British thermal unit per hour, each.
- (o) One (1) natural gas fired space heater, known as space heater #4 installed in 1985, exhausted to stack S43, rated at 0.3 million British thermal unit per hour.
- (p) One (1) natural gas fired space heater, known as space heater #6 installed in 1985, exhausted to stack S44, rated at 0.25 million British thermal unit per hour.
- (q) Two (2) natural gas fired space heaters, known as space heaters #7 and #8 installed in 1990, exhausted to stacks S21 and S22 respectively, rated at 0.25 million British thermal unit per hour, each.
- (r) One (1) natural gas fired space heater, known as space heater #9 installed in 1995, exhausted to stack S45, rated at 0.25 million British thermal unit per hour.
- (s) One (1) natural gas fired space heater, known as space heater #10 installed in 1985, exhausted to stack S23, rated at 0.25 million British thermal unit per hour.
- (t) Three (3) natural gas fired space heaters, known as space heaters #11 through #13 installed in 1996, exhausted to stacks S49 through S50 respectively, rated at 0.25 million British thermal unit per hour, each.

- (u) One (1) natural gas fired space heater, known as space heater #14 installed in 1979, exhausted to stack S1, rated at 0.225 million British thermal unit per hour.
- (v) One (1) natural gas fired space heater, known as space heater #15 installed in 1991, exhausted to stack S2, rated at 0.225 million British thermal unit per hour.
- (w) Three (3) natural gas fired space heaters, known as space heater #16 through #18 installed in 1991, exhausted to stacks S9, S15 and S16 respectively, rated at 0.25 million British thermal unit per hour, each.
- (x) One (1) natural gas fired space heater, known as space heater #19 installed in 1991, exhausted to stack S24, rated at 0.112 million British thermal unit per hour.
- (y) Two (2) natural gas fired space heaters, known as space heater #20 and #24 installed in 1979, exhausted to stacks S26 and S48 respectively, rated at 0.10 million British thermal unit per hour, each.
- (z) One (1) natural gas fired space heater, known as space heater #21 installed in 1991, exhausted to stack S27, rated at 0.12 million British thermal unit per hour.
- (aa) One (1) natural gas fired space heater, known as space heater #23 installed before 1977, exhausted to stack S46, rated at 0.10 million British thermal unit per hour.
- (bb) One (1) natural gas fired space heater, known as space heater #25 installed in 1998, exhausted to stacks S54, rated at 0.30 million British thermal unit per hour.
- (cc) One (1) flowcoater, known as flowcoater #1, installed in 1995, exhausted to S7, equipped with dry filters for particulate overspray control, capacity: 1,500 axles per hour.
- (dd) One (1) waste water treatment system, known as wastewater treatment, installed in 1995, equipped with scrubber F, capacity: 7,000 gallons per day.
- (ee) Six (6) metal inert gas (MIG) welders, known as MIG #1 through #6, installed in 1998, exhausted to baghouse C, capacity 125 pounds per wire per day, each.
- (ff) Two (2) metal inert gas (MIG) welders, known as MIG #7 and #8, installed in 1997, exhausted to baghouse E, capacity 125 pounds per wire per day, each.
- (gg) One (1) metal inert gas (MIG) welder, known as MIG #9, installed in 1998, exhausted to baghouse A, capacity 125 pounds per wire per day.
- (hh) One (1) metal inert gas (MIG) welder, known as MIG #10, installed in 1996, exhausted to baghouse C, capacity 125 pounds per wire per day.
- (ii) Three (3) metal inert gas (MIG) welders, known as MIG #11 through #13, installed in 1992, exhausted to baghouse B, capacity 100 pounds per wire per day, each.
- (jj) Two (2) metal inert gas (MIG) welders, known as MIG #14 and #15, installed in 1996, exhausted to baghouse A, capacity 100 pounds per wire per day, each.
- (kk) Two (2) metal inert gas (MIG) welders, known as MIG #16 and #17, installed in 1998, exhausted to baghouse B, capacity 100 pounds per wire per day, each.

- (ll) Two (2) metal inert gas (MIG) welders, known as MIG #18 and #19, installed in 1998, exhausted to baghouse D, capacity 100 pounds per wire per day, each.
- (mm) Two (2) metal inert gas (MIG) welders, known as MIG #20 and #21, installed in 1997, exhausted to baghouse D, capacity 100 pounds per wire per day, each.
- (nn) One (1) metal inert gas (MIG) welder, known as MIG #22, installed in 1995, exhausted to baghouse B, capacity 100 pounds per wire per day.
- (oo) One (1) metal inert gas (MIG) welder, known as MIG #23, installed in 1994, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (pp) One (1) metal inert gas (MIG) welder, known as MIG #24, installed in 1996, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (qq) One (1) metal inert gas (MIG) welder, known as MIG #25, installed in 1996, exhausted to baghouse B, capacity 100 pounds per wire per day.
- (rr) One (1) metal inert gas (MIG) welder, known as MIG #26, installed in 1995, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (ss) One (1) metal inert gas (MIG) welder, known as MIG #27, installed in 1996, exhausted to baghouse D, capacity 100 pounds per wire per day.
- (tt) Two (2) metal inert gas (MIG) welders, known as MIG #28 and #29, installed in 1993, exhausted to baghouse D, capacity 50 pounds per wire per day.
- (uu) One (1) metal inert gas (MIG) welder, known as MIG #30, installed in 1994, exhausted to baghouse E, capacity 50 pounds per wire per day.
- (vv) One (1) metal inert gas (MIG) welder, known as MIG #31 and #32, installed in 1996, exhausted to baghouse A, capacity 50 pounds per wire per day.
- (ww) One (1) intershield welder, known as INT #33, installed in 1987, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (xx) Two (2) intershield welders, known as INT #34 and #35, installed in 1988, exhausted to baghouse C and D respectively, capacity 100 pounds per wire per day.
- (yy) One (1) intershield welder, known as INT #36, installed in 1993, exhausted to baghouse A, capacity 100 pounds per wire per day.
- (zz) One (1) intershield welder, known as INT #37, installed in 1994, exhausted to baghouse E, capacity 100 pounds per wire per day.
- (aaa) One (1) intershield welder, known as INT #38, installed in 1995, exhausted to baghouse D, capacity 100 pounds per wire per day.
- (bbb) Two (2) intershield welders, known as INT #39 and #40, installed in 1996, exhausted to baghouse D, capacity 100 pounds per wire per day.
- (ccc) One (1) intershield welder, known as INT #41, installed in 1997, exhausted to baghouse A, capacity 100 pounds per wire per day.

- (ddd) Two (2) intershield welders, known as INT #42 and #43, installed in 1998, exhausted to baghouse C and D respectively, capacity 100 pounds per wire per day.
- (eee) One (1) gasoline storage tank, known as T1, installed in 1980, capacity: 2,000 gallons.
- (fff) One (1) fuel oil storage tank, known as T3, installed in 1952, capacity: 12,000 gallons.
- (ggg) Two (2) fuel oil storage tanks, known as T4 and T5, installed in 1952, capacity: 12,000 gallons, each. (These tanks have been empty for twenty years)
- (hhh) One (1) hydraulic oil storage tank, known as T7, installed in 1980, capacity: 10,000 gallons.
- (iii) One (1) cutting oil storage tank, known as T8, installed in 1980, capacity: 10,000 gallons.
- (jjj) One (1) sulfuric acid storage tank, known as T9, installed in 1985, capacity: 10,000 gallons.
- (kkk) One (1) magnesium hydroxide storage tank, known as T10, installed in 1985, capacity: 10,000 gallons.
- (III) One (1) quenching operation, known as quenching, installed in 1984, capacity: 30,000 gallons per year.

### Existing Approvals

There are no existing approvals for this source.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S1	space heater	20.0	n/a	4.2	450
S2	space heater	20.0	n/a	4.2	450
S3	space heater	24.0	0.67	3.4	450
S4	space heater	24.0	0.67	3.4	450
S5	air make-up unit	27.0	1.00	83.0	450
S6	washer	34.0	0.84	25.0	450
S7	flowcoater	27.0	1.33	3,455	ambient
S8	air make-up unit	35.25	1.00	52.0	450
S9	space heater	20.0	n/a	4.2	450
S10	air make-up unit	20.0	n/a	84.0	450
S11	air make-up unit	20.0	n/a	84.0	450
S12	boiler	32.50	0.67	50.0	450
S14	air make-up unit	11.0	n/a	69.0	450
S15	space heater	20.0	n/a	4.2	450
S16	space heater	20.0	n/a	4.2	450
S18	washer	31.0	0.67	17.0	450
S19	washer	31.0	0.67	17.0	450
S20	washer	31.0	0.67	17.0	450

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S21	space heater	28.0	0.5	1.13	450
S22	space heater	28.0	0.67	4.2	450
S23	space heater	28.0	0.67	3.4	450
S24	space heater	28.0	0.34	2.5	450
S26	space heater	25.0	n/a	2.5	450
S27	space heater	25.0	n/a	2.5	450
S29	washer	29.0	0.67	15.0	450
S30	washer	29.0	0.5	33.4	450
S31	washer	29.0	0.5	15.0	450
S34	washer	29.0	0.5	7.6	450
S35	washer	29.0	0.5	7.6	450
S36	washer	24.0	0.83	62.0	450
S37	space heater	28.0	0.412	4.2	450
S38	space heater	28.0	0.412	4.2	450
S39	air make-up unit	28.0	1.0	52.0	450
S40	air make-up unit	35.0	1.0	84.0	450
S41	washer	29.0	0.5	84.0	450
S43	space heater	28.0	0.412	4.2	450
S44	space heater	28.0	0.412	4.2	450
S45	space heater	28.0	0.34	2.5	450
S46	space heater	14.0	1.0	3.4	450
S47	draw furnace	29.0	1.0	60.0	450
S48	space heater	25.0	n/a	2.5	450
S49	space heater	27.0	0.67	60.0	450
S50	space heater	27.0	0.67	60.0	450
S51	space heater	27.0	0.67	60.0	450
S52	washer	29.0	0.5	52.0	450
S54	space heater	30.0	0.3	48.0	450
S56	washer	26.0	0.83	62.0	450
A	welding	27.0	3.6	17,000	80
B	welding	26.0	3.6	12,000	80
C	welding	27.0	2.5	30,000	80
D	welding	27.0	3.6	25,000	80
E	welding	27.0	3.6	24,000	ambient
F	wastewater treatment	28.25	2.0	4,500	ambient

#### Enforcement Issue

- (a) IDEM is aware that all the equipment at the source has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.

- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 19, 1999, with additional information received on August 13, 1999 and November 2, 1999.

### Emission Calculations

See Appendix A pages 1 through 4 of 4 of this document for detailed emissions calculations.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	6.48
PM <sub>10</sub>	8.02
SO <sub>2</sub>	0.458
VOC	1.85
CO	22.7
NO <sub>x</sub>	27.0

HAPs	Potential To Emit (tons/year)
Benzene	0.0006
Dichlorobenzene	0.0003
Formaldehyde	0.020
Hexane	0.485
Toluene	0.0009
Lead	0.0001

HAPs	Potential To Emit (tons/year)
Cadmium	0.003
Chromium	0.001
Nickel	0.003
Manganese	0.356
TOTAL	0.870

- (a) The potentials to emit (as defined in the Indiana Rule) of NO<sub>x</sub> are equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5 and 326 IAC 2-6.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### Actual Emissions

No previous emission data has been received from the source.

#### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPS
Welding	0.060	0.060	0.00	0.00	0.00	0.00	0.004
Combustion	0.512	2.05	0.162	1.48	22.7	27.0	0.866
Flowcoater Quenching Wastewater Treatment	0.00	0.00	0.296	1.34	0.00	0.00	0.00
Tanks	0.00	0.00	0.00	0.372	0.00	0.00	0.00
Total Emissions	0.570	2.11	0.408	1.85	22.7	27.0	0.870



### County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Kosciusko County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.570
PM <sub>10</sub>	2.11
SO <sub>2</sub>	0.408
VOC	1.85
CO	22.7
NO <sub>x</sub>	27.0
Single HAP	0.356
Combination HAPS	0.870

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

## **Part 70 Permit Determination**

### **326 IAC 2-7 (Part 70 Permit Program)**

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPS is less than 25 tons/year.

This is the first air approval issued to this source.

## **Federal Rule Applicability**

- (a) Tank T1 and Tanks T7-T10 are not subject to New Source Performance Standards (NSPS) Subparts K, Ka, or Kb because each of these tanks has a capacity less than 40 cubic meters. Tank T3 is not subject to New Source Performance Standards (NSPS) Subparts K, Ka, or Kb because it was constructed prior to June 11, 1973.
- (b) The boiler is not subject to New Source Performance Standards (NSPS) Subpart Dc because the boiler was constructed prior to June 9, 1989 and has a maximum design heat input capacity less than 10 million British thermal units per hour.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

## **State Rule Applicability - Entire Source**

### **326 IAC 2-6 (Emission Reporting)**

This source is located in Kosciusko County and the potential to emit any criteria pollutants is less than one-hundred (100) tons per year; therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

### **326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) boiler identified as boiler, constructed after September 21, 1983, is subject to the requirements of 326 IAC 6-2-4 and the particulate matter emissions are limited by the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

For natural gas:

$Pt = 1.09/(0.13)^{0.26} = 1.85 \text{ lb/MMBtu heat input}$ . Pursuant to 326 IAC 6-2-4(a) Pt shall not exceed 0.6 lbs/MMBtu.

Based on Appendix A, the potential PM emission rate is:

$0.001 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.0002 \text{ lbs/hr}$   
 $(0.0002 \text{ lbs/hr} / 0.13 \text{ MMBtu/hr}) = 0.002 \text{ lbs PM per MMBtu}$

Therefore, the one (1) boiler will comply with this rule.

#### 326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) from the welding operations shall be limited to 0.777 pounds per hour for a process weight rate of 167 pounds of welding wire per hour. This limit was calculated by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The potential PM emissions after control as shown on page 1 of 4 of Appendix A are 0.014 pounds per hour. Therefore, the welding operations comply with this rule.

The baghouses shall be in operation at all times the welders are in operation, in order to comply with this limit.

- (b) Particulate matter emissions from the surface coating operation shall be limited by the

following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour.}$$

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-1 (Applicability), the flowcoater operation is not subject to the requirements of this rule because the potential VOC emissions are less than 15 pounds per day.

#### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations on pages 1 and 4 of Appendix A for detailed air toxic calculations.

#### **Conclusion**

The construction and operation of this axle component production and assembly operation. shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 085-10675-00033.

# Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for New Construction and Operation

<b>Source Name:</b>	<b>Dana Corporation - Spicer Axle Division</b>
<b>Source Location:</b>	<b>501 West Railroad Avenue, Syracuse, Indiana 46567</b>
<b>County:</b>	<b>Kosciusko</b>
<b>Construction Permit No.:</b>	<b>MSOP 085-10675-00033</b>
<b>SIC Code:</b>	<b>3714</b>
<b>Permit Reviewer:</b>	<b>Paula M. Miano/MES</b>

On November 16, 1999, the Office of Air Management (OAM) had a notice published in the Times Union, Warsaw, Indiana, stating that Dana Corporation - Spicer Axle Division had applied for a construction permit to construct and operate an axle component production and assembly operation. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On December 10, 1999, Kathryn M. Stowring and Charles J. Staehler of August Mack Environmental, on behalf of Dana Corporation - Spicer Axle Division submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

### Comment 1:

Sections A.2.t, D.1.t, and the TSD:

The three (3) natural gas-fired space heaters #11 through #13 are exhausted to stacks S49 through S51, respectively.

### Response 1:

The following change has been made:

- (t) Three (3) natural gas-fired space heaters, known as space heaters #11 through #13 installed in 1996, exhausted to stacks S49 through S501 respectively, rated at 0.25 million British thermal unit per hour, each.

### Comment 2:

Section A.2.cc, D.3.cc and the TSD:

The flowcoater has a capacity of 1,500 axles per day.

### Response 2:

The following change has been made:

- (cc) One (1) flowcoater, known as flowcoater #1, installed in 1995, exhausted to S7, equipped with dry filters for particulate overspray control, capacity: 1,500 axles per ~~hour~~ **day**.

This change in capacity has led to the following changes:

Page 2 of 5 of the TSD Appendix A has been updated. There is no change to the potential emission calculations resulting from this change.

**Comment 3:**

Section A.2.dd, D.3.dd and the TSD:  
The wastewater treatment system was installed in 1985.

**Response 3:**

The following change has been made:

- (dd) One (1) waste water treatment system, known as wastewater treatment, installed in ~~1995~~ **1985**, equipped with scrubber F, capacity: 7,000 gallons per day.

**Comment 4:**

Section A.2. ee through ddd, D.2. ee through ddd and the TSD:  
Please revise the identification numbers assigned to each of the welder to reflect Dana's Company ID number presented in the August 12, 1999 Response to Request for Additional Information provided on form FF. Also, the units used to describe the capacity of each welder should be stated in "pounds of wire per day". An example of the requested notation is provided below.

- (ee) Six (6) metal inert gas (MIG) welders, known as MIG # 3-76-72, 3-76-67, 3-76-69, 3-76-70, 3-76-68 and 3-76-71, installed in 1998, exhausted to baghouse C, capacity of 125 pounds of wire per day, each.
- (vv) Should read that two (2) metal inert gas (MIG) welders, known as MIG # 3-76-47 and 3-76-49, installed in 1996, exhausted to baghouse A, capacity 50 pounds of wire per day.
- (ww) Should read that one (1) intershield welder, known as INT # 3-76-25, installed in 1987, exhausted to baghouse D, capacity 100 pounds of wire per day.

**Response 4:**

The following changes have been made:

- (ee) Six (6) metal inert gas (MIG) welders, known as MIG ~~#1 through #6~~ **3-76-72, 3-76-67, 3-76-69, 3-76-70, 3-76-68 and 3-76-71**, installed in 1998, exhausted to baghouse C, capacity 125 pounds ~~per of~~ wire per day, each.
- (ff) Two (2) metal inert gas (MIG) welders, known as MIG ~~#7 and #8~~ **3-76-58 and 3-76-53**, installed in 1997, exhausted to baghouse E, capacity 125 pounds ~~per of~~ wire per day, each.
- (gg) One (1) metal inert gas (MIG) welder, known as MIG ~~#9~~ **3-76-73**, installed in 1998, exhausted to baghouse A, capacity 125 pounds ~~per of~~ wire per day.
- (hh) One (1) metal inert gas (MIG) welder, known as MIG ~~#10~~ **3-76-55**, installed in 1996, exhausted to baghouse C, capacity 125 pounds ~~per of~~ wire per day.

- (ii) Three (3) metal inert gas (MIG) welders, known as MIG ~~#11 through #13~~ **3-76-34, 3-76-33 and 3-76-35**, installed in 1992, exhausted to baghouse B, capacity 100 pounds ~~per of~~ wire per day, each.
- (jj) Two (2) metal inert gas (MIG) welders, known as MIG ~~#14 and #15~~ **3-76-48 and 3-76-46**, installed in 1996, exhausted to baghouse A, capacity 100 pounds ~~per of~~ wire per day, each.
- (kk) Two (2) metal inert gas (MIG) welders, known as MIG ~~#16 and #17~~ **3-76-62 and 3-76-60**, installed in 1998, exhausted to baghouse B, capacity 100 pounds ~~per of~~ wire per day, each.
- (ll) Two (2) metal inert gas (MIG) welders, known as MIG ~~#18 and #19~~ **3-76-63 and 3-76-65**, installed in 1998, exhausted to baghouse D, capacity 100 pounds ~~per of~~ wire per day, each.
- (mm) Two (2) metal inert gas (MIG) welders, known as MIG ~~#20 and #21~~ **3-76-57 and 3-76-61**, installed in 1997, exhausted to baghouse D, capacity 100 pounds ~~per of~~ wire per day, each.
- (nn) One (1) metal inert gas (MIG) welder, known as MIG ~~#22~~ **3-76-43**, installed in 1995, exhausted to baghouse B, capacity 100 pounds ~~per of~~ wire per day.
- (oo) One (1) metal inert gas (MIG) welder, known as MIG ~~#23~~ **3-76-40**, installed in 1994, exhausted to baghouse E, capacity 100 pounds ~~per of~~ wire per day.
- (pp) One (1) metal inert gas (MIG) welder, known as MIG ~~#24~~ **3-76-44**, installed in 1996, exhausted to baghouse E, capacity 100 pounds ~~per of~~ wire per day.
- (qq) One (1) metal inert gas (MIG) welder, known as MIG ~~#25~~ **3-76-52**, installed in 1996, exhausted to baghouse B, capacity 100 pounds ~~per of~~ wire per day.
- (rr) One (1) metal inert gas (MIG) welder, known as MIG ~~#26~~ **3-76-45**, installed in 1995, exhausted to baghouse E, capacity 100 pounds ~~per of~~ wire per day.
- (ss) One (1) metal inert gas (MIG) welder, known as MIG ~~#27~~ **3-76-54**, installed in 1996, exhausted to baghouse D, capacity 100 pounds ~~per of~~ wire per day.
- (tt) Two (2) metal inert gas (MIG) welders, known as MIG ~~#28 and #29~~ **3-76-37 and 3-76-36**, installed in 1993, exhausted to baghouse D, capacity 50 pounds ~~per of~~ wire per day, each.
- (uu) One (1) metal inert gas (MIG) welder, known as MIG ~~#30~~ **3-76-41**, installed in 1994, exhausted to baghouse E, capacity 50 pounds ~~per of~~ wire per day.
- (vv) One (1) metal inert gas (MIG) welder, known as MIG ~~#31 and #32~~ **3-76-47 and 3-76-49**, installed in 1996, exhausted to baghouse A, capacity 50 pounds ~~per of~~ wire per day.
- (ww) One (1) intershield welder, known as INT ~~#33~~ **3-76-25**, installed in 1987, exhausted to baghouse E, capacity 100 pounds ~~per of~~ wire per day.
- (xx) Two (2) intershield welders, known as INT ~~#34 and #35~~ **1-73-1 and 1-73-2**, installed in 1988, exhausted to baghouse C and D respectively, capacity 100 pounds ~~per of~~ wire per day, each.
- (yy) One (1) intershield welder, known as INT ~~#36~~ **1-73-4**, installed in 1993, exhausted to baghouse A, capacity 100 pounds ~~per of~~ wire per day.

- (zz) One (1) intershield welder, known as INT ~~#37~~ **3-76-39**, installed in 1994, exhausted to bag-house E, capacity 100 pounds ~~per of~~ wire per day.
- (aaa) One (1) intershield welder, known as INT ~~#38~~ **3-76-42**, installed in 1995, exhausted to bag-house D, capacity 100 pounds ~~per of~~ wire per day.
- (bbb) Two (2) intershield welders, known as INT ~~#39 and #40~~ **3-76-50 and 3-76-51**, installed in 1996, exhausted to baghouse D, capacity 100 pounds ~~per of~~ wire per day, each.
- (ccc) One (1) intershield welder, known as INT ~~#41~~ **3-76-59**, installed in 1997, exhausted to bag-house A, capacity 100 pounds ~~per of~~ wire per day.
- (ddd) Two (2) intershield welders, known as INT ~~#42 and #43~~ **3-76-64 and 3-76-66**, installed in 1998, exhausted to baghouse C and D respectively, capacity 100 pounds ~~per of~~ wire per day, each.

**Comment 5:**

Section A.2.fff, D.2.fff, and the TSD:

The one (1) fuel oil storage tank, known as T3, is empty. Please rephrase this sentence and combine with the sentence from Section A.2.ggg to read as follows: Three (3) empty storage tanks, known as T3 through T5, installed in 1952, capacity 12,000 gallons, each.

**Response 5:**

The following changes have been made:

~~(fff) One (1) fuel oil storage tank, known as T3, installed in 1952, capacity: 12,000 gallons.~~

~~(ggg fff)~~ **Two (2) Three (3) empty** fuel oil storage tanks, known as **T3 through T4 and T5**, installed in 1952, capacity: 12,000 gallons, each. ~~(These tanks have been empty for twenty years)~~

~~(hhh ggg)~~ **One (1) hydraulic oil storage tank**, known as T7, installed in 1980, capacity: 10,000 gallons.

~~(iii hhh)~~ **One (1) cutting oil storage tank**, known as T8, installed in 1980, capacity: 10,000 gallons.

~~(jjj iii)~~ **One (1) sulfuric acid storage tank**, known as T9, installed in 1985, capacity: 10,000 gallons.

~~(kkk jjj)~~ **One (1) magnesium hydroxide storage tank**, known as T10, installed in 1985, capacity: 10,000 gallons.

~~(H kkk)~~ **One (1) quenching operation**, known as quenching, installed in 1984, capacity: 30,000 gallons per year.



**Comment 6:**

Section A.2:

Several pieces of machining equipment exist at the Dana source that utilize a cutting fluid continuously during operation. As a result of rule 2-7-1 (21)(G)(vi)(BB), machining where an aqueous cutting coolant continuously floods the machining interface is considered an insignificant activity. Please state in Dana's minor source operating permit that these pieces of equipment are considered an insignificant activity.

Five milling machines, four buffing machines, and one sanding machine exist at the facility that utilize dust collectors with a gas flow rate less than 2,000 actual cubic feet per minute and a grain loading of 0.01 grains per actual cubic foot. As a result of rule 2-7-1 (21)(G)(xxiii)(AA-CC), grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute are considered an insignificant activity. Please state in Dana's minor source operating permit that these pieces of equipment are considered an insignificant activity. The dust collectors vented inside the source have been identified on the site plan provided in Attachment B.

One buffing machine utilizes an exhaust fan to vent particulate emissions through a stack (S57) to the atmosphere. The exhaust fan has a gas flow rate of 2,000 cubic feet per minute. The stack is 15 inches in diameter with a height of 31 feet. The exhaust temperature is ambient. Please incorporate the stack information in the TSD of the minor source operating permit. The particulate emissions generated from the buffing machine are considered an insignificant activity as a result of rule 326 IAC 2-7-1 (21)(B). Please state in Dana's minor source operating permit that this piece of equipment is considered an insignificant activity.

**Response 6:**

Rule 326 IAC 2-7 (Part 70 Permit Program) is not applicable to this source and as such can not have emission units designated as "insignificant activities." Pursuant to 326 IAC 2-6-1 (Minor Source Operating Program), the program requires all emission units to be described pursuant 326 IAC 2-6.1-4(a)(2)(C). Therefore, the following equipment had been added to the permit since insignificant activity designation is only allowed within the Part 70 Permit Program and the Federally Enforceable State Operating Permit pursuant to 326 IAC 2-8.

Therefore, the following equipment has been added to the equipment list as follows:

**(III) Five (5) milling machines, known as 1-50-36, 1-50-37, 2-50-6, 2-50-7 and 2-50-8, capacity: 397 pounds per hour, each.**

**(mmm) One (1) milling machine, known as 1-53-23, capacity: 895 pounds per hour.**

**(nnn) One (1) milling machine, known as 1-53-11, capacity: 1,282 pounds per hour.**

**(ooo) One (1) milling machine, known as 1-53-16, capacity: 1,244 pounds per hour.**

**(ppp) One (1) milling machine, known as 1-53-18, capacity: 1,809 pounds per hour.**

**(qqq) One (1) milling machine, known as 1-53-22, capacity: 2,829 pounds per hour.**

**(rrr) One (1) boring machine, known as 3-77-2, capacity: 929 pounds per hour.**

- (sss) One (1) boring machine, known as 3-77-3, capacity: 768 pounds per hour.
- (ttt) One (1) boring machine, known as 3-77-4, capacity: 910 pounds per hour.
- (uuu) Five (5) de-burring machines, capacity: 812 per hour, each.
- (vvv) Four (4) buffing machines, known as 2-11-2, 2-11-4, 1-61-87 and 1-61-91, one (1) buffing machine exhausts to S57, capacity: 700 pounds per hour, each.

The emission calculations have been updated in Appendix A and the potential emission tables have been updated as follows to account for equipment (III) through (vvv):

Pollutant	Potential To Emit (tons/year)
PM	<del>6.48</del> <b>34.6</b>
PM <sub>10</sub>	<del>8.02</del> <b>36.1</b>
SO <sub>2</sub>	0.458
VOC	1.85
CO	22.7
NO <sub>x</sub>	27.0

#### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPS
Welding	0.060	0.060	0.00	0.00	0.00	0.00	0.004
Combustion	0.512	2.05	0.162	1.48	22.7	27.0	0.866
Flowcoater Quenching Wastewater Treatment	0.00	0.00	0.296	1.34	0.00	0.00	0.00
Tanks	0.00	0.00	0.00	0.372	0.00	0.00	0.00
<b>Milling, De-burring, Boring, Buffing</b>	<b>28.1</b>	<b>28.1</b>	<b>0.00</b>	<b>0.000</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Total Emissions	<del>0.570</del> <b>28.7</b>	<del>2.11</del> <b>30.2</b>	0.408	1.85	22.7	27.0	0.870

The stack summary has been updated as follows:

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S1	space heater	20.0	n/a	4.2	450
S2	space heater	20.0	n/a	4.2	450
S3	space heater	24.0	0.67	3.4	450
S4	space heater	24.0	0.67	3.4	450
S5	air make-up unit	27.0	1.00	83.0	450
S6	washer	34.0	0.84	25.0	450
S7	flowcoater	27.0	1.33	3,455	ambient
S8	air make-up unit	35.25	1.00	52.0	450
S9	space heater	20.0	n/a	4.2	450
S10	air make-up unit	20.0	n/a	84.0	450
S11	air make-up unit	20.0	n/a	84.0	450
S12	boiler	32.50	0.67	50.0	450
S14	air make-up unit	11.0	n/a	69.0	450
S15	space heater	20.0	n/a	4.2	450
S16	space heater	20.0	n/a	4.2	450
S18	washer	31.0	0.67	17.0	450
S19	washer	31.0	0.67	17.0	450
S20	washer	31.0	0.67	17.0	450
S21	space heater	28.0	0.5	1.13	450
S22	space heater	28.0	0.67	4.2	450
S23	space heater	28.0	0.67	3.4	450
S24	space heater	28.0	0.34	2.5	450
S26	space heater	25.0	n/a	2.5	450
S27	space heater	25.0	n/a	2.5	450
S29	washer	29.0	0.67	15.0	450
S30	washer	29.0	0.5	33.4	450
S31	washer	29.0	0.5	15.0	450
S34	washer	29.0	0.5	7.6	450
S35	washer	29.0	0.5	7.6	450
S36	washer	24.0	0.83	62.0	450
S37	space heater	28.0	0.412	4.2	450
S38	space heater	28.0	0.412	4.2	450
S39	air make-up unit	28.0	1.0	52.0	450
S40	air make-up unit	35.0	1.0	84.0	450
S41	washer	29.0	0.5	84.0	450
S43	space heater	28.0	0.412	4.2	450

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S44	space heater	28.0	0.412	4.2	450
S45	space heater	28.0	0.34	2.5	450
S46	space heater	14.0	1.0	3.4	450
S47	draw furnace	29.0	1.0	60.0	450
S48	space heater	25.0	n/a	2.5	450
S49	space heater	27.0	0.67	60.0	450
S50	space heater	27.0	0.67	60.0	450
S51	space heater	27.0	0.67	60.0	450
S52	washer	29.0	0.5	52.0	450
S54	space heater	30.0	0.3	48.0	450
S56	washer	26.0	0.83	62.0	450
<b>S57</b>	<b>buffing machine</b>	<b>31.0</b>	<b>1.25</b>	<b>2000</b>	<b>ambient</b>
A	welding	27.0	3.6	17,000	80
B	welding	26.0	3.6	12,000	80
C	welding	27.0	2.5	30,000	80
D	welding	27.0	3.6	25,000	80
E	welding	27.0	3.6	24,000	ambient
F	wastewater treatment	28.25	2.0	4,500	ambient

The following section has been added to the permit:

#### SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - Milling machines, Boring machines, De-burring machines and Buffing machines	
(III)	Five (5) milling machines, known as 1-50-36, 1-50-37, 2-50-6, 2-50-7 and 2-50-8, capacity: 397 pounds per hour, each.
(mmm)	One (1) milling machine, known as 1-53-23, capacity: 895 pounds per hour.
(nnn)	One (1) milling machine, known as 1-53-11, capacity: 1,282 pounds per hour.
(ooo)	One (1) milling machine, known as 1-53-16, capacity: 1,244 pounds per hour.
(ppp)	One (1) milling machine, known as 1-53-18, capacity: 1,809 pounds per hour.
(qqq)	One (1) milling machine, known as 1-53-22, capacity: 2,829 pounds per hour.
(rrr)	One (1) boring machine, known as 3-77-2, capacity: 929 pounds per hour.
(sss)	One (1) boring machine, known as 3-77-3, capacity: 768 pounds per hour.
(ttt)	One (1) boring machine, known as 3-77-4, capacity: 910 pounds per hour.
(uuu)	Five (5) de-burring machines, capacity: 812 per hour, each.
(vvv)	Four (4) buffing machines, known as 2-11-2, 2-11-4, 1-61-87 and 1-61-91, one (10 buffing machine exhausts to S57 capacity: 700 pounds per hour, each.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.	

## **Emission Limitations and Standards [326 IAC 2-6.1-5(1)]**

### **D.4.1 Particulate Matter (PM) [326 IAC 6-3]**

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the milling machines, boring machines, de-burring machines and buffing machines shall be limited by the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

## **Compliance Determination Requirement [326 IAC 2-1.1-11]**

### **D.4.2 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test these emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **Comment 7:**

Section B.6:  
Please remove the requirement of submitting an Affidavit of Construction since Dana is already in operation.

#### **Response 7:**

Since the source is already constructed, it will not have to submit an Affidavit of Construction. Section B.6 contains standard MSOP language; therefore, no changes have been made.

#### **Comment 8:**

Section D.2.1:  
The process weight rate of each welder varies from 125, 100 to 50 pounds of wire per day. Please revise the allowable PM emissions accordingly.

#### **Response 8:**

To accommodate process weight rates less than 125 pounds per day, pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emission limitations for processes with process weight rates of less than one hundred (100) pounds per hour from any process not already regulated by any New Source Performance Standard, and which has a maximum process weight rate less than one hundred (100) pounds per hour shall not exceed 0.551 pounds per hour. The following changes have been made:

**D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

- (a) The PM from the twelve (12) space heaters, nine (9) vacuum formers, One (1) drill press, one (1) chop saw, eleven (11) band saws, three (3) saws, one (1) table saw, one (1) sonic welder, one (1) torch, three (3) grinders, one (1) bench grinder, and two (2) shapers shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) **Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emission limitations for processes with process weight rates less than one hundred (100) pounds per hour from any process not already regulated by any New Source Performance Standard, and which has a maximum process weight rate less than one hundred (100) pounds per hour shall not exceed 0.551 pounds per hour.**

**Comment 9:**

Section D.3.4 (a)(3):

Please remove this reporting requirement from Section D.3.4 (a) since Dana does not utilize any cleanup solvents in their operations.

**Response 9:**

Condition D.3.4 does not contain any reporting requirements. Condition D.3.4 requires record keeping. If the source does not use any cleanup solvents, then no records are needed.

**Comment 10:**

Section D:

Please include a copy of the Semi Annual Compliance Form in the minor source operating permit.

**Response 10:**

The form has been added to the following page.

**Comment 11:**

Section TSD rule 326 IAC 2-6 (Emission Reporting): Please remove the requirement of submitting an annual statement of the actual emissions to the IDEM.

**Response 11:**

The requirement, in the TSD, to submit an annual statement of actual emissions is incorrect. This will be noted. No requirement in the MSOP asks for this statement.

**OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

**Source Name:** Dana Corporation-Spicer Axle Division  
**Source Address:** 501 West Railroad Avenue, Syracuse, Indiana 46567  
**Mailing Address:** P.O. Box 67, Syracuse, Indiana 46567  
**MSOP Permit No.:** 085-10675-00033

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)</b>	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

**Form Completed By:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

Appendix A: Welding and Thermal Cutting

Page 1 of 5 TSD App A

Company Name: Dana Corporation - Spicer Axle Division  
 Address City IN Zip: 501 West Railroad Avenue, Syracuse Indiana 46567  
 Permit No./Plt ID: MSOP 085-10675-00033  
 Reviewer: Paula M.Miano  
 Date: February 19, 1999

PROCESS	Number of Stations	Max. wire consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)	10	5.210		0.0052	0.0003	0.00000	0.00000	0.27092	0.01657	0.00005	0.00005	0.017
Metal Inert Gas (MIG)	17	4.170		0.0052	0.0003	0.00000	0.00000	0.36863	0.02254	0.00007	0.00007	0.023
Metal Inert Gas (MIG)	5	2.080		0.0052	0.0003	0.00000	0.00000	0.05408	0.00331	0.00001	0.00001	0.003
SCC 30905254												
PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Intershield	9	4.170		0.01510	0.00089	0.00001	0.00000	0.56670	0.03344	0.00019	0.00015	0.034
SCC 30905354												
Intrshield	2	4.170		0.01220	0.00066	0.00000	0.00000	0.10175	0.00552	0.00003	0.00002	0.006
SCC 30905355												
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								1.362	0.081	0.000	0.000	0.082
Potential Emissions lbs/day								32.69	1.953	0.009	0.007	1.969
Potential Emissions tons/year								5.97	0.356	0.002	0.001	0.359
Controlled tons/year								0.0597	0.0036	0.00002	0.00001	0.0036
					Control Efficiency	99.0%						

METHODOLOGY

\*Emission Factors are from USEPA FIRE and AP-42

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.



**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

Page 2 of 5 TSD App A

**Company Name:** Dana Corporation - Spicer Axle Division  
**Address City IN Zip:** 501 West Railroad Avenue, Syracuse Indiana 46567  
**MSOP:** 085-10675  
**Pit ID:** 085-00033  
**Reviewer:** Paula M. Miano  
**Date:** February 19, 1999

Amended 12/16/99, see TSD addendum

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Flowcoater																
W/R Low Glass Black	10.47	52.17%	52.1%	0.07%	65.3%	34.67%	0.000053	62.5	0.021	0.007	0.000	0.001	0.000	0.000	0.021	100%

Unit = 1 lb of axle

Control Efficiency 99.90%

**State Potential Emissions**

**Add worst case coating to all solvents**

**Uncontrolled  
Controlled**

**0.000 0.001 0.0001 0.000  
0.000 0.001 0.0001 0.000**

**Quenching**

	Density (lbs/gal)	Weight % Volatile	Annual Throughput (gal)	Potential VOC Emissions (lb/yr)	Potential VOC Emissions (tons/yr)
Quenching	8.9	1.00%	30000	2685	1.34

**Wastewater Treatment**

	Maximum Throughput (lbs/hr)	Weight % Volatile	Weight % SO2	Potential SO2 Emissions (lb/yr)	Potential SO2 Emissions (tons/yr)
Wastewater Treatment	69.0	0.10%	97.94%	592	0.296

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lbs/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used  
Potential Quenching VOC Emissions = Density(lbs/gal) \* Weight% Volatile \* Annual Throughput (gal)  
Potential Wastewater SO2 Emissions = Maximum Throughput(lbs/hr) \* Weight% Volatile \* Weight% SO2

## Appendix A: Emissions Calculations

### Natural Gas Combustion Only

MM BTU/HR <100

#### Small Industrial Boiler

**Company Name:** Dana Corporation - Spicer Axle Division  
**Address City IN Zip:** 501 West Railroad Avenue, Syracuse Indiana 46567  
**MSOP:** 085-10675  
**Plt ID:** 085-00033  
**Reviewer:** Paula M. Miano  
**Date:** February 19, 1999

One (1) draw furnace rated at 4.0 MMBtu/hr	Seven (7) heated washers rated at 1.5 MMBtu/hr each
One (1) boiler rated at 0.13 MMBtu/hr	Two (2) heated washers rated at 0.3 MMBtu/hr
Two (2) heated washer rated at 2.54 MMBtu/hr each	Two (2) heated washers rated at 0.8 MMBtu/hr each
Six (6) air make-up units rated at 5.0 MMBtu/hr each	Eleven (11) space heaters rated at 0.25 MMBtu/hr each
One (1) air make-up unit rated at 4.125	Six (6) space heaters rated at 0.3 MMBtu/hr each
Two (2) space heaters rated at 0.225 MMBtu/hr each	Three (3) space heaters rated at 0.10 MMBtu/hr each
One (1) space heaters rated at 0.12 MMBtu/hr each	One (1) space heaters rated at 0.112 MMBtu/hr each

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

61.6

539.3

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.512	2.05	0.162	27.0	1.48	22.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

Page 4 of 5 TSD App A

**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions**

**Company Name:** Dana Corporation - Spicer Axle Division  
**Address City IN Zip:** 501 West Railroad Avenue, Syracuse Indiana 46567  
**CP:** 085-10675  
**Plt ID:** 085-00033  
**Reviewer:** Paula M. Miano  
**Date:** February 19, 1999

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.663E-04	3.236E-04	2.022E-02	4.854E-01	9.169E-04

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.348E-04	2.966E-04	3.775E-04	1.025E-04	5.663E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations****Particulate****From Milling, Boring, De-Buring and Buffing Operations**

**Company Name:** Dana Corporation - Spicer Axle Division  
**Address City IN Zip:** 501 West Railroad Avenue, Syracuse Indiana 46567  
**MSOP:** 085-10675  
**Plt ID:** 085-00033  
**Reviewer:** Paula M. Miano  
**Date:** February 19, 1999

**Revised 1/18/00, see TSD addendum**

**Milling Operations**

Equipment Number	Maximum Throughput (lbs/hr)	Maximum Output (lbs/hr)	PM/PM10 Emissions (tons/yr)
1-50-36	396.78	396.10	2.98
1-50-37	396.78	396.10	2.98
2-50-6	396.78	396.10	2.98
2-50-7	396.78	396.10	2.98
2-50-8	396.78	396.10	2.98
1-53-23	856.95	856.08	3.81
1-53-11	1281.83	1280.97	3.77
1-53-16	1243.56	1243.56	0.00
1-53-18	1809.01	1808.58	1.88
1-53-22	2829.42	2828.56	3.77

**Boring Operations**

3-77-2	929.25	929.25	0.00
3-77-3	768.2	768.2	0.00
3-77-4	910.0	910.0	0.00

**De-burring Operations**

5 machines	811.7	811.7	0.00
------------	-------	-------	------

**Buffing Operations**

2-11-2	699.75	699.75	0.00
2-11-4	699.75	699.75	0.00
1-61-87	699.75	699.75	0.00
1-61-91	699.75	699.75	0.00
			<b>28.1</b>